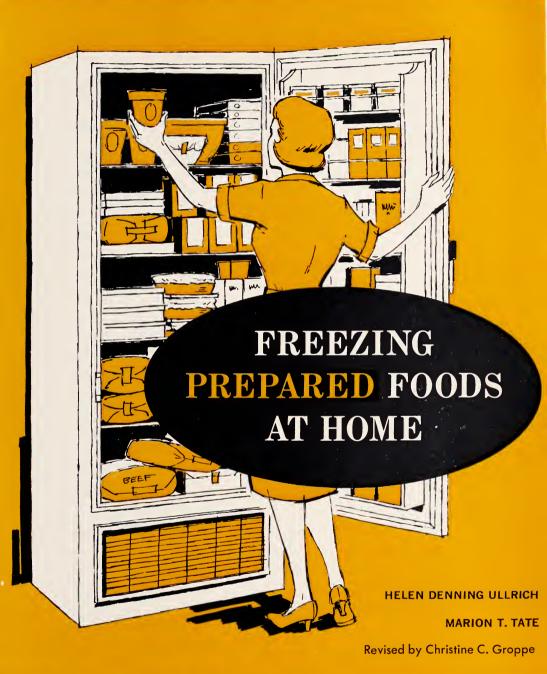


UNIVERSITY



CALIFORNIA AGRICULTURAL **Experiment Station** Extension Service

CIRCULAR 524 Revised

### Freezing Prepared Foods at Home

With a freezer you can prepare anything from spaghetti and meat balls to cream puffs, store them in the freezer, and have them ready for busy-day meals or parties. Lunches, diet foods, and desserts can be made in quantities for several days' use. Using the frozen foods, other members of your family can prepare meals by merely defrosting or heating enough for the family.

High quality, fresh foods should be used. They should be packaged in moisture-vapor-resistant containers, bags, or paper, and frozen quickly. The freezer temperature should be 0° F or lower, and foods should be stored only for the length of time recommended in this circular for the individual food.

Some foods, such as certain fried foods, raw tomatoes and greens for salads, egg whites, and cream pie fillings, among others, will not freeze well. Even foods which freeze well may take as long to defrost as to cook, and some may lose flavor, texture, and color during the freezing process. Seasonings must be used with special care and some foods must be prepared in special ways for freezing.

In the section "How to Prepare, Package, and Serve Combination Foods," this circular gives specific instructions on freezing individual foods as well as recommendations for storage time.

### JANUARY, 1969

THE AUTHORS: Helen Denning Ullrich is former Extension Nutritionist, Agricultural Extension, Berkeley. Marion T. Tate is former Laboratory Technician, Agricultural Extension Service, Berkeley. Revised by Christine C. Groppe, Nutrition Specialist, Berkeley.

### CONTENTS

OODS THAT DO NOT FREEZE WELL  FFFS IN FREEZING COMBINATION FOODS Preparation Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE  IOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS I Appetizers, Hors d'Oeuvres I Apples Beans, Baked Beets, Harvard Biscuits 1 Bread and Rolls 1 Cakes 12, 1 Candies 1 Cookies 1 Conmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Custards 1 Doughnuts 1 Doughnuts 1 Dressings 1 Fish Dishes 16, 1 Frostings and Fillings Frozen Desserts 1 Gravy 1 Ice Cream Macaroni or Spaghetti Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 2 Puddings Ravioli 2 Salads 2 Sandwiches 2 Soufflés Soups and Purées 5 Spaghetti Stew 2 Spaghetti 5 Spagheti 5 Spaghetti	DVANTAGES		3
OODS THAT DO NOT FREEZE WELL  FEPS IN FREEZING COMBINATION FOODS Preparation Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE OW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS Appetizers, Hors d'Oeuvres Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Sandes Soups and Purées Spaghetti Stew	N THE OTHER HAND		3
FREEZE WELL  FEPS IN FREEZING  COMBINATION FOODS  Preparation  Packaging  Freezing and Storing  Thawing and Cooking  EFREEZING  ARE OF FOOD DURING  POWER FAILURE  FROW TO PREPARE, PACKAGE AND  SERVE COMBINATION FOODS  Appetizers, Hors d'Oeuvres  Apples  Beans, Baked  Beets, Harvard  Biscuits  Bread and Rolls  Cakes  12,1  Candies  Cheeses  13,1  Cookies  Cornmeal Mush or  Scrapple  Cranberry Sauce or Relish  Cream, Whipping  Creamed Casserole Dishes  Cream Puff and Eclair Shells  Loustards  Doughnuts  Dressings  Fish Dishes  Frozen Desserts  Gravy  Ice Cream  Macaroni or Spaghetti  Meats, whole  Meats and Poultry  Nuts  Pastry  Pies  Potatoes  Puddings  Ravioli  Salads  Sandwiches  Soups and Purées  Spaghetti  Stew			
COMBINATION FOODS Preparation Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS  Appetizers, Hors d'Oeuvres  Apples Beans, Baked Beets, Harvard Biscuits I Bread and Rolls Cakes Candies Cheeses 13, 1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			4
COMBINATION FOODS Preparation Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE IOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS Appetizers, Hors d'Oeuvres Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12,1 Candies Cheeses 13,1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			
Preparation Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS I Appetizers, Hors d'Oeuvres Apples Beans, Baked Beets, Harvard Biscuits I Bread and Rolls Cakes I 2, 1 Candies Cheeses I 3, 1 Cookies Cornmeal Mush or Scrapple Granberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells I Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frostings and Fillings Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poiza Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			4
Packaging Freezing and Storing Thawing and Cooking  EFREEZING ARE OF FOOD DURING POWER FAILURE  TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS  Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes Condies Cookies Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Doughnuts Dressings Fish Dishes Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			4
Freezing and Storing Thawing and Cooking  EFREEZING  ARE OF FOOD DURING POWER FAILURE  TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS  Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes Condies Cookies Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Postatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			5
Thawing and Cooking  EFREEZING  ARE OF FOOD DURING POWER FAILURE  IOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS I Appetizers, Hors d'Oeuvres I Apples I Beans, Baked I Beets, Harvard I Biscuits I Bread and Rolls I Cakes I2, I Candies I Cookies I Cornmeal Mush or Scrapple I Cranberry Sauce or Relish I Cream, Whipping I Creamed Casserole Dishes I Cream Puff and Eclair Shells I Custards I Doughnuts I Dressings I Frostings and Fillings I Frostings and Fillings I Frostings and Fillings I Frostings and Fillings I Brest I Macaroni or Spaghetti I Meats, whole I Meats and Poultry I Nuts I Pastry I Pies I Poiza I Potatoes I Puddings I Salads I Sandwiches I Salads I Sandwiches I Salads I Sandwiches I Salads I Sandwiches I Salads	0 0		7
EFREEZING  ARE OF FOOD DURING POWER FAILURE  IOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS  Apples  Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12,1 Candies 13,1 Cookies 13,1 Cookies 16 Cornmeal Mush or Scrapple 17 Cranberry Sauce or Relish 18 Cream, Whipping 19 Creamed Casserole Dishes 19 Creamed Casserole Dishes 19 Cream Puff and Eclair Shells 19 Custards 10 Doughnuts 10 Dressings 15 Frostings and Fillings 15 Frozen Desserts 16 Gravy 17 Lee Cream 18 Macaroni or Spaghetti 19 Meats, whole 19 Meats and Poultry 19 Nuts 19 Pies 20 Pizza 21 Potatoes 19 Puddings 19 Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew 22 Spaghetti Stew 23 Spaghetti Stew 25 Soups and Purées Spaghetti Stew			
ARE OF FOOD DURING POWER FAILURE TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS Appetizers, Hors d'Oeuvres Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew	I nawing and Gooking		7
POWER FAILURE  TOW TO PREPARE, PACKAGE AND SERVE COMBINATION FOODS 1 Apples 1. Beans, Baked 1. Beets, Harvard 1. Biscuits 1. Bread and Rolls 1. Cakes 12, 1. Candies 1. Cheeses 13, 1. Cookies 1. Cornmeal Mush or Scrapple 1. Cranberry Sauce or Relish 1. Cream, Whipping 1. Creamed Casserole Dishes 1. Custards 1. Doughnuts 1. Dressings 1. Frostings and Fillings 1. Frostings and Fillings 1. Frostings and Fillings 1. Frostings and Fillings 1. Macaroni or Spaghetti 1. Meats, whole 1. Meats and Poultry 1. Nuts 1. Pastry 1. Pies 20, 2 Pizza 2. Potatoes 2. Puddings 2. Ravioli 2. Sandwiches 2.3, 2 Sandwiches 2.3, 2 Sandwiches 2.3, 2 Sandwiches 2.3, 2 Spaghetti 5.	EFREEZING		9
SERVE COMBINATION FOODS I Appetizers, Hors d'Oeuvres I Apples Is Beans, Baked Is Beets, Harvard Isscuits Is Bread and Rolls Iscuits Is Cakes Iz, I Candies Is Cheeses Is, I Cookies Is Cornmeal Mush or Scrapple Is Cranberry Sauce or Relish Is Cream, Whipping Is Creamed Casserole Dishes Is Cream Puff and Eclair Shells Is Custards Is Doughnuts Is Dressings Is Fish Dishes Is Gravy Is Is Cream	ARE OF FOOD DURING		
SERVE COMBINATION FOODS   Appetizers, Hors d'Oeuvres   1 Apples   1 Beans, Baked   1 Beets, Harvard   1 Biscuits   1 Bread and Rolls   1 Cakes   12, 1 Candies   1 Cookies   1 Cookies   1 Cookies   1 Cornmeal Mush or Scrapple   1 Cranberry Sauce or Relish   1 Cream, Whipping   1 Creamed Casserole Dishes   1 Coustards   1 Coughnuts   1 Co	POWER FAILURE		9
Appetizers, Hors d'Oeuvres 1 Apples 1 Beans, Baked 1 Beets, Harvard 1 Biscuits 1 Bread and Rolls 1 Cakes 12, 1 Candies 1 Cookies 1 Cornmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Custards 1 Doughnuts 1 Dressings 1 Fish Dishes 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 2 Puddings Ravioli 2 Salads 3 Sandwiches 23, 2 Sauces 5 Soufs and Purées 5 Spaghetti 5 Stew 2  Pies 2 Spaghetti 5 Stew 2 Spaghetti 5 Season 1 Season 1 Season 1 Season 2 Season 2 Season 3 Season	IOW TO PREPARE, PACKAGE AN	ID	
Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Coornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	SERVE COMBINATION FOO	DS	10
Apples Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Coornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	Abbetizers, Hors d'Oeuvres	5	10
Beans, Baked Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frozen Desserts Gravy Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poiza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew			10
Beets, Harvard Biscuits Bread and Rolls Cakes 12, 1 Candies Cheeses 13, 1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Sandwiches Soups and Purées Spaghetti Stew			10
Biscuits Bread and Rolls Cakes 12,1 Candies 12,1 Cheeses 13,1 Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Itee Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew			10
Bread and Rolls 1 Cakes 12,1 Candies 1 Cheeses 13,1 Cookies 1 Cornmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Custards 1 Doughnuts 1 Doughnuts 1 Dressings 1 Fish Dishes 16,1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18,1 Nuts 1 Pastry 19,2 Pies 20,2 Pizza 2 Potatoes 2 Puddings Ravioli 2 Salads 2 Sandwiches 23,5 Sauces 2 Soufflés 5 Soups and Purées 5 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Spaghett			11
Cakes 12, 1 Candies 1 Cheeses 13, 1 Cookies 1 Cornmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Cream Puff and Eclair Shells 1 Custards 1 Doughnuts 1 Dressings 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream 1 Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23, 3 Sandwiches 23, 5 Sauces 5 Soufs and Purées 5 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Scandwiches 23, 5 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Stew 2 Spaghetti 5 Spaghe			11
Candies 13, 1 Cheeses 13, 1 Cookies 1 Cornmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Cream Puff and Eclair Shells 1 Custards 1 Doughnuts 1 Doughnuts 1 Dressings 16, 1 Frostings and Fillings 1 Frozen Desserts 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream 1 Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23, 2 Sandwiches 23, 2 Sauces 5 Soufs and Purées 5 Spaghetti 5 Stew 2			
Cheeses 13, 1 Cookies 1 Cornmeal Mush or Scrapple 1 Cranberry Sauce or Relish 1 Cream, Whipping 1 Creamed Casserole Dishes 1 Cream Puff and Eclair Shells 1 Custards 1 Doughnuts 1 Dressings 1 Fish Dishes 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream 1 Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 20, 2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23, 2 Sauces 5 Soufs and Purées 5 Spaghetti 5 Stew 2 Spaghetti 5 Selish 1 Stew 2 Spaghetti 5 Selish 2 Spaghetti 5 Spaghetti 5 Selish 3 Spaghetti 5 Spaghetti			13
Cookies Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Souffles Soups and Purées Spaghetti Stew			
Cornmeal Mush or Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Souffle's Soups and Purées Spaghetti Stew			
Scrapple Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Ish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Souffle's Soups and Purées Spaghetti Stew			14
Cranberry Sauce or Relish Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frostings and Fillings Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Pizza Potatoes Puddings Ravioli Salads Sandwiches Soufflés Soups and Purées Spaghetti Stew			
Cream, Whipping Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Poizza Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			14
Creamed Casserole Dishes Cream Puff and Eclair Shells Custards Doughnuts Dressings Fish Dishes Frozen Desserts Gravy Ite Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Sandwiches Soups and Purées Spaghetti Stew			14
Cream Puff and Eclair Shells 1 Custards 1 Doughnuts 1 Dressings 1 Fish Dishes 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream Macaroni or Spaghetti Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 20, 2 Pizza 2 Potatoes 2 Puddings Ravioli 2 Salads 3 Sandwiches 23, 2 Sauces Soufflés Soups and Purées Spaghetti 5 Stew 16, 12 Stew 17 Steman Steman Shells 18 Identify Shells 18	Cream, Whipping		15
Custards Doughnuts Doressings Fish Dishes Frostings and Fillings Frozen Desserts Gravy Iteration of Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew			15
Doughnuts Dressings I pressings I fish Dishes I foot Desserts I can be seen to see the		ells	15
Dressings Fish Dishes Fish Dishes Frozen Desserts Frozen Desse			15
Fish Dishes 16, 1 Frostings and Fillings 1 Frozen Desserts 1 Gravy 1 Ice Cream 1 Macaroni or Spaghetti 1 Meats, whole 1 Meats and Poultry 18, 1 Nuts 1 Pastry 19, 2 Pies 20, 2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23, 2 Sandwiches 23, 2 Sauces 2 Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 2	Doughnuts		15
Frostings and Fillings Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	Dressings		16
Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew		16,	17
Frozen Desserts Gravy Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	Frostings and Fillings		17
Ice Cream Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew			17
Macaroni or Spaghetti Meats, whole Meats and Poultry Nuts Pastry Pies Potatoes Puddings Ravioli Salads Sandwiches Soups and Purées Spaghetti Stew	Gravy		17
Meats, whole Meats and Poultry 18, 1 Nuts Pastry 19, 2 Pies 20, 2 Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Souffles Soups and Purées Spaghetti Stew	Ice Cream		18
Meats, whole Meats and Poultry 18, 1 Nuts Pastry 19, 2 Pies 20, 2 Pizza Potatoes Puddings Ravioli Salads Sandwiches Sandwiches Soufflés Soups and Purées Spaghetti Stew	Macaroni or Spaghetti		18
Meats and Poultry Nuts 1 Pastry 19,2 Pies 20,2 Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew 19,2 19,2 20,2 20,2 20,2 20,2 20,2 20,2 20,2 2			18
Nuts Pastry 19,2 Pies 20,2 Pies 20,2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23,2 Sauces 2 Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 22		18,	19
Pastry 19,2 Pies 20,2 Pies 20,2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23,2 Sauces 2 Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 2			19
Pies 20,2 Pizza 2 Potatoes 2 Puddings 2 Ravioli 2 Salads 2 Sandwiches 23,2 Sauces 2 Soufflés 2 Soups and Purées 3 Spaghetti 2 Stew 2		19.	
Pizza Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	*		
Potatoes Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew		,	21
Puddings Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew			22
Ravioli Salads Sandwiches Sauces Soufflés Soups and Purées Spaghetti Stew	Puddings		23
Salads Sandwiches 23, 2 Sauces Soufflés Soups and Purées Spaghetti Stew 23, 2 24, 2 25, 2 26, 2 27, 2 28, 2 29, 2 20, 2			23
Sandwiches 23,2 Sauces 2 Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 2			23
Sauces 2 Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 2		23	
Soufflés 2 Soups and Purées 2 Spaghetti 2 Stew 2		40,	24
Soups and Purées Spaghetti Stew 2			24
Spaghetti 2 Stew 2	2		24
Stew 2			
			24
Sweet Polatoes 2			25
	Sweet Polatoes		25

# FREEZING PREPARED FOODS AT HOME

full freezer means easier meal planning. If you stock prepared foods, such as frozen casseroles or main dishes, baked goods and desserts, in addition to a supply of fruits, vegetables, and meats, you will have the ingredients for many complete meals right in the freezer. At a freezer temperature of

0° F many of these foods can be kept as long as a year, while others can be kept only a short time. By planning a steady flow of foods into and out of the freezer, you can prepare anything from simple meals to elegant formal dinners beforehand.

### **ADVANTAGES**

These are some of the advantages of using your freezer to store prepared and precooked foods:

- You can prepare the food at a time when it is convenient for you.
- By increasing recipes, you can prepare greater quantities of foods and freeze part of them. If you increase a family-sized recipe two to four times, the proportions may differ slightly. After you have frozen and defrosted the recipe for the first time, make note of any changes which may be needed because of the increased quantity.
- Parties can be more enjoyable since you can prepare the foods ahead of time and freeze them.
- Other members of the family can prepare a well-balanced meal by simply defrosting the foods for it.
- Foods for packed lunches can be prepared ahead of time.
- Special diet food can be prepared in quantity and packaged for the individual.
- Most baked foods will keep better in the freezer than in the refrigerator.

### ON THE OTHER HAND

• Freezing may not actually save time in getting a meal since the food must be defrosted. For instance, it may take as long to defrost and heat biscuits as it takes to prepare them from a mix or use refrigerated biscuits. However,

while food is defrosting you can be doing other things.

• Freezing does not improve the quality of any foods. Use only high quality, fresh products.

• Most prepared and precooked foods should be kept only a short time. Combined foods may not freeze in the same way that their individual ingredients do, and many of them have a rather short storage time.

- Flavors may be weakened.
- Textures may become soggy.
- Color may fade.
- Freezing is not an inexpensive way to preserve food.

## FOODS THAT DO NOT FREEZE WELL

While most foods freeze well (see those listed under "How to Prepare, Package, and Serve Combination Foods," pages 10 to 25), some do not.

- Fried foods lose crispness and have a warmed-over flavor after a short storage. Exceptions are French-fried potatoes and onion rings.
  - Some milk sauces curdle.
- Custards and cream pie fillings become watery and lumpy.
- Potatoes do not have good texture after they are frozen. They may also darken. It is better to add potatoes to such foods as soups and stews when

they are defrosted and heated for serving.

- Fat may separate from gravy if too much is used in proportion to the starch or flour. Use less fat when making gravy to be frozen, and stir it well when reheating.
- Lettuce, other greens, or raw tomatoes do not freeze well. They lose their crispness and become soggy.

• Fruit jelly in sandwiches may soak the bread.

- Cooked egg whites get tough and rubbery when frozen.
- Meringue toughens and sticks to paper after a few days of freezing.

**Note:** Some of the above are now commercially available because of improved techniques.

# STEPS IN FREEZING COMBINATION FOODS

### Preparation

Use only fresh, high-quality food. Freezing does not improve the quality. Also, freezing does not kill all of the food spoilage organisms, so that clean, quick food preparation is essential for high-quality frozen food. For best quality, don't try to prepare too much food at one time.

Season Food with Care. Use pure extract of vanilla. Artificial flavors give a slightly unpleasant flavor to cakes and other foods.





• Spices and seasoning may change flavor in combination foods that have not been cooked before freezing or in foods stored for more than 3 months. It may be better to use spices and seasonings sparingly or add them when the food is served.

Precooked Foods. Slightly undercook those foods that will be reheated after freezing. Cool foods quickly to preserve the freshness and quality. Do not allow warm food to remain at room temperature for several hours before you cool it—the quality will be poor and the chances of food spoilage will be greater. Containers of hot food can be put in a pan of water and ice. To speed cooling, transfer hot food from baking dish to another pan, preferably in shallow layers. Change the water frequently to speed the cooling or run cold water around the pan.

Cool cooked foods quickly to preserve freshness and quality, and to protect against food spoilage. Speed cooling by placing containers of food in running water or in ice water.

### Packaging

Pack the food in family-sized portions or in amounts you plan to use later, so that you will avoid defrosted leftovers. It may also be handy to have some individual packages.

Exclude as much air as possible. Air shortens storage life because it affects color, flavor, and texture of food. Fill empty spaces in the package with crumpled moisture-resistant paper.

Containers. Package the food in moisture-vapor-resistant containers, bags, or paper. Choose packaging best suited to the size and shape of the food.

• For foods containing liquids, rigid containers are usually most suitable. These may be glass, metal, plastic, or heavily-waxed cardboard in sizes and shapes to suit the food to be frozen. Covers should be tight-fitting and there should be headspace for the food



Freeze frosted cakes before wrapping in freezer paper. If slices are frozen, place a double fold of moisture-resistant paper between slices. Place whole cakes in a box or carton.

to expand when it freezes. (See "Guide for Headspace.")

• For solid foods, such as baked goods, moisture-vapor-resistant papers are suitable, for example, aluminum foil, polyethylene sheets, clear plastic adhesive wraps, or plastic-coated or laminated freezer papers. Separate

layers of solid foods with two pieces of freezer paper.

• Some foods may be stored in freezer bags, which are usually polyethylene. Use one of a suitable size, press out the excess air, and close it by twisting and tying. A cardboard carton gives added protection and makes stacking easier.

• If you wish to free the baking dish for other uses, line dish with foil or plastic wrap before food is added. After the product is frozen it may be easily removed, sealed, and wrapped for storage. For use, remove outside wrappings and slip the frozen food into the original baking dish.

• Heat-proof containers such as pie pans and baking or casserole dishes are also useful for freezing food. They must be covered and sealed.

• Freezer pouches made of special plastics which can be heat-sealed may be used. To heat frozen food, the pouch is immersed directly in boiling water.

For a casserole dish, double the recipe and freeze half for future meals. If individual casseroles are used, cover them with freezer paper. Tape around the edges for a secure seal.





Package food in moisture-vapor-resistant containers, bags, or paper. For foods containing liquids, rigid containers are best. These may be glass, metal, plastic or heavily waxed cardboard in sizes and shapes to suit the food to be frozen. Covers should be tight-fitting.

### Guide for Headspace for Liquid or Semiliquid Foods

Tall, straight, or slightly flared containers or bags	Headspace
Pints	½ inch
Quarts	l inch
Low, broad containers	
Pints	1/4 inch
Ouarts	1/6 inch
Pints	½ inch
Quarts	½ inch

### Freezing and Storing

Freeze small amounts of food at a time so that they will freeze rapidly. Place the packages in the coldest spot in the freezer. Space them so that cold air can circulate around the packages. It is important to lower the food temperature below 40° F within 4 hours to reduce the growth rate of spoilage organisms.

Storage Temperature. The temperature should be kept at 0° F or lower. Each time the temperature rises, the quality of the food is affected. For each 5 degrees above 0° F, the storage time for the food is cut in half. A refrigerator-freezer combination should be used only for short storage of frozen foods.

### Thawing and Cooking

For detailed instructions on specific foods, see pages 10 to 25. In general,



Many types of sandwiches can be frozen for a week's lunches. Cupcakes or other lunch treats can be wrapped individually and frozen.

plan to defrost and cook just enough to eat at one meal.

Precooked foods may be defrosted in the refrigerator, at room temperature, or by heating. The wrapping material should be left on to prevent accumulation of moisture when possible.

Uncooked casserole dishes usually are put directly in the oven from the freezer. Add 15 to 20 minutes to the baking time.

Storage Time. The quality of foods during storage and the length of time they should be stored may be affected by any of these—

• Original quality of food.

Method of preparation.

• Wrapping material. Moisturevapor-resistant paper, bags, and containers should be used.

• Fat content. Foods high in fat con-

tent lose quality rapidly.

• Incorporated air. When air is not excluded, food will change color, flavor and texture more rapidly.

Storage temperature.

As a rule, do not store food too long. Some frozen prepared and precooked foods will begin to lose their freshness after 2 weeks, while others keep well for several months. In general, plan to

use combination frozen foods after only a short storage period. Foods kept longer than shown in the list which follows show some loss of quality when defrosted.

### Approximate Storage Time for Frozen Prepared Foods at $0^{\circ}$ F

Less than 1 month
Cakes, frosted
Chiffon pies
Pizza
Potatoes, baked, mashed
Sandwiches, open-face
Seafood salads
Soufflé
Whole meals

I to 2 months
Casseroles, fish
Frozen salads
Meat loaf
Meats, fried, without gravy
Pastry, unbaked
Pumpkin pie, unbaked
Rolls, partly baked

2 to 4 months
Biscuits, baked
Cakes, unfrosted
Cup cakes, unfrosted
Fruit pies
Meats, roasted, with gravy
Potatoes, French-fried
Quick bread, baked

4 to 6 months
Casserole, general
Cookies, unbaked
Frozen desserts
Meat pies
Sandwiches
Sponge cakes

6 to 8 months
Bread, baked
Cakes, angel
Cookies, baked
Fruit pies, mince
Nuts, shelled
Rolls, baked
Rolls, partially baked
Soups
Fruit pie fillings

6 to 12 months Cakes, fruit Candies Casserole, chicken Cheese, hard

### REFREEZING

Freezing does not sterilize food—it simply prevents further bacterial growth as long as food is kept in a frozen state. As soon as thawing starts, bacterial growth may begin. Refreezing causes loss of quality in texture, flavor and appearance, and may also reduce food value.

The conditions under which food has thawed will determine if it should be refrozen. You may safely refreeze partially thawed food if it has been thawing for only a brief time (for instance, if it was stored overnight in the refrigerator during a temporary power failure in the freezer), and it still feels cold and contains ice crystals.

On the other hand, if foods have slowly thawed over a period of several days to a temperature of 40° F, they are not likely to be fit for refreezing.

Meats, poultry, most vegetables and some prepared foods may become unsafe to eat. Most fruits and fruit products soon develop an undesirable flavor.

Discard any unpleasant tasting or smelling food since it may contain micro-organisms that make it unsafe. A good rule to follow is: "When in doubt, throw it out."

When a freezer full of food accidentally becomes thawed it represents quite a loss, and the question of whether or not to refreeze arises. There is no home method that can accurately test if a food is wholesome and safe for refreezing, so there is always a calculated risk. Refrozen vegetables may become tough. If thawed fruits become soft and flavorless, it may be advisable to cook them.

# CARE OF FOOD DURING POWER FAILURE

If you know that the power is to be turned off, turn the freezer to its coldest setting. The lower the temperature, the longer the food will take to thaw. If power fails suddenly, try to find out how long it will be off.

Cover the freezer with blankets, which will provide insulation and help keep the freezer cold longer.

Do not open the freezer except to add dry ice or to transfer the food for storage elsewhere.

A full freezer will remain cold longer than a partially-filled one and will usually keep food frozen for 2 days. A halffilled freezer may not keep food frozen more than a day.

If dry ice is put into the freezer soon after the power goes off, 50 pounds should keep the food temperature in a full 20-cubic-foot cabinet below freezing for 3 to 4 days. If the cabinet is half filled or less, it will remain below freezing 2 to 3 days. Work quickly with dry ice. Be sure the room is well ventilated. Never handle dry ice with bare hands. Place dry ice on cardboard or boards set on top of food or on shelves. Don't place it directly on packages, because dry ice freezes the contents too quickly.

### 101

# HOW TO PREPARE, PACKAGE, AND SERVE COMBINATION FOODS

TO SERVE  To ast and crisp base appe-	ed petizers in single layers on metal pans and freeze. Package toast or crisp base appetizers separately from other tidbits tainers which hold not more than 2 to 3 layers. Separate than 2 to 3 layers soft cheese, layers with pieces of moisture ture about 1 hour.  I tidbits than 2 to 3 layers. Separate ture about 1 hour.  Is of cheese, layers with pieces of moisture ture about 1 hour.  I ture about 1 hour.	until barely Wrap each apple individu- ping at 100m temperature.  ally. Pack in cartons; seal and To serve hot, unwrap and freeze.  F, 15 to 20 minutes.	l, and cool. Package, seal, and freeze. Thaw in wrapping at room 8 to 10 months temperature.	ork cut in small containers. Be sure all meat antil barely ten- so much soften- so much soften- so much soften- hot dish and an aruning cold a running cold  Take cooled beans in freezer and boiler or in a saucepan with a small amount of water added, stirring frequently to prevent stirring frequently	
	ual, until barely quickly.  Ally. Pack in cartons; seal and freeze.  Package, seal, and freeze.	Package, seal, and freeze.	temperature.	.*	Prepare as usual, but cook sauce just until it thickens. Pack, leaving head space (see or in a saucepan with water cool quickly.
HORS d'OEUVRES (Also see Sandwiches, page 23)  APPLES Baked de			Applesauce	BEANS Baked	BEETS P

1					
2 to 3 months	2 to 4 months	6 to 12 months	1 to 2 months	6 to 8 months	6 to 8 months
To serve hot, heat unthawed biscuits in a moderate oven, 350° F, for 15 to 20 minutes.	Thaw in wrapping at room temperature, or if wrapped in aluminum foil, hear in hot oven, 400° F. Slice fruit and nut breads while partially frozen to prevent crumbling.	Thaw in wrapping at room temperature about 1 hour. Or heat in slow oven, 300° F, about 20 minutes.	Heat without thawing in a pop-up toaster, under the broiler, or on a baking sheet in a hot oven, 400° F, for 2 to 3 minutes.	Thaw in wrappings at room temperature, or, if wrapped in aluminum foil, heat in a slow oven (300° F) about 15 minutes for bread, 5 to 10 minutes for rolls.	Thaw in wrappings 10 to 15 minutes. Bake in a bot oven, 425° F, 5 to 10 minutes or until lightly browned. If the undercrust of the rolls is too moist, bake on a cooling rack instead of a baking sheet.
Freeze before packaging.	Wrap in moisture-vapor-re- sistant paper.	Package in moisture-vapor- resistant paper or container.	Wrap individually or in pairs in moisture-vapor-resistant paper.	Freeze before wrapping.	Wrap and freeze.
Make and bake as usual.	Prepare as usual and bake to light brown: Gingerbread Nut and fruit breads Coffee cake Steamed breads Cool quickly.	Prepare as usual. Bake and cool.	Bake to a light brown. Cool.	Prepare and bake as usual. Cool quickly.	Prepare as usual. Small rolls freeze best. Bake in a slow oven, 275° F, for about 20 minutes. Cool quickly.
BISCUITS Baked (unbaked not recommended, as will be smaller and less tender)	BREAD AND ROLLS Quick breads	Muffins	Waffles	Yeast breads and rolls, baked (unbaked yeast rolls not recommended; will be smaller and have poor texture)	Yeast breads, partially baked
<b>/</b>					

			٠		
	STORAGE TIME	Egg white cakes—6 months. Whole-egg cakes—4 to 6 months. Egg-yolk cakes—2 months	2 to 4 months		2 to 3 months
HANDES OF	TO SERVE	Thaw in wrappings on a rack at room temperature for 1 to 2 hours. Or, if not frosted and if wrapped in aluminum foil, thaw in a slow oven, 300° E, 15 to 20 minutes. Frosted cakes may be thawed at room temperature or in the refrigenator. Remove wrapping if frosting begins to stick to it.	Thaw in wrappings at room temperature about 2 hours. Or, if not frosted and wrapped in aluminum foil, thaw in wrappings in a slow oven, 300° F, 10 to 15 minutes for layer cakes and 25 to 30 minutes for loaf cakes. Frosted cakes may be thawed at room temperature or in the refrigerator. Remove the wrapping if the frosting begins to stick to it.		Thaw at room temperature about I hour, or if not frosted and if wrapped in aluminum foil, heat in a slow oven, 300° F, for 10 minutes.
OTATO A VIOLE	PACKAGING	If frosted, freeze before wrapping. If unfrosted, wrap and freeze. If slices are frozen, place a double fold of moisture-resistant paper between slices. If tube pan has been used, fill hole in cake with crumpled moisture-resistant paper. Place whole cake in a box or carton to prevent crushing.	If frosted, freeze before wrapping. If unfrosted, wrap and freeze. If slices are frozen, place a double fold of moisture-resistant paper between the slices. Place whole cake in a box or carton to prevent crushing.		Freeze before wrapping. Wrap individually or in pairs in moisture-vapor-resistant paper. Store in box that can be opened easily to remove just the number to be used.
MOTAGAGAGA	FREFARATION	Make as usual. Cool. Do not use egg white in frosting.	Prepare and bake as usual. Cool. Do not use egg white in frosting. (Frosting and cake are best frozen separately. Thaw each and then frost the cake.)	Not recommended; when batter is frozen, volume of cake after baking will be smaller.	Make as usual, but bake in paper cups for easier storage.
EOOD	FOOD	CAKES Angel Chiffon Sponge	Shortened—including chocolate, nut and spice types, baked	Unbaked	Cupcakes, baked

1							
	STORAGE TIME	4 months	6 to 8 months	6 months	6 months	6 months	8 to 12 months
	TO SERVE	Thaw in wrapping in the re- frigerator.	Thaw in wrapping 15 to 20 minutes if cookies are crisp type. They will be less crisp than cookies baked from frozen dough. Soft cookies may be placed on serving plate to thaw.	Bake without thawing.	Bake formed cookies without thawing in hot oven, 400° F, 10 minutes. Thaw bulk dough at room temperature until soft enough to drop by spoonfuls on greased baking sheet. Bake in hot oven, 400° F, 10 to 15 minutes.	If used as mush, heat in top of double boiler. Add water if necessary. For frying, do not thaw. Brown in a heavy, lightly greased skillet.	Thaw in refrigerator or at room temperature.
	PACKAGING	Wrap in moisture-vapor- resistant paper.	Package in cartons or plastic bags, with moisture-resistant paper between layers and crumpled in spaces.	Wrap and freeze.	If cookies are formed, freeze on baking sheet. Store in moisture-vapor-resistant carton with moisture-resistant paper between layers. Package bulk dough in rigid container or plastic bag.	Freeze slices before wrapping. Separate slices with 2 pieces of moisture-resistant paper. Pack in rigid container or plastic bag.	Pack in rigid container. Cover with a piece of crumpled moisture-resistant paper. Leave head space. (See page 7.)
	PREPARATION	When soft cheeses are at desired ripeness, freeze to keep them from ripening further.	Prepare as usual and cool.	For bar or refrigerator cookies, form dough into roll. Slice if desired.	For <i>drop</i> cookies, drop on baking sheet or prepare bulk dough.	Cook until thick. Mold in loaf pan. Cool and slice.	Make as usual.
	FOOD	CHEESES, continued Soft cheeses (such as Camembert)	COOKIES Baked	Unbaked (all types, except meringue)		CORNMEAL MUSH OR SCRAPPLE	CRANBERRY SAUCE OR RELISH
147	[14]						

			* <del>*-</del> -
Chicken—10 to 12 months. Shellfish—1 to 2 months. Other—4 to 6 months.	1 to 2 months		3 to 4 weeks
Heat, from frozen or thawed state, in top of double boiler or in moderate oven, 350° F. If sauce has separated, stirring will make it smooth.	Thaw in wrapping at room temperature about 10 min- utes; thaw filled shells longer.		Thaw in hot oven, 400° F, or in wrapping at room temperature. Roll glazed doughnuts in granulated sugar if desired.
Pack in rigid, wide-mouthed containers. Cover with a single thickness of paper, cut to fit the surface Leave head space (see page 7). Lobster crab, and shrimp will gradually toughen in storage.	Wrap individual puffs. Freeze. Put into rigid containers without crowding puffs. Fill spaces with crumpled moisture-resistant paper.		Package in plastic bags, or in rigid containers with crumpled moisture-resistant paper inserted in air spaces. If container is not of freezer material, wrap in moisture-vapor-resistant paper.
Prepare as usual. Slightly undercook added food. If waxy rice flour is available, use it to replace half or more of the flour. Omit hard-cooked eggs and cooked potatoes. Gool rapidly by setting pan in cold running water or in ice water. Stir to hasten cooling, but don't beat in air.	Make as usual. Cool. Slit and remove any moist parts. Do not fill with cream filling. Ice cream may be used as filling if desired.	Not recommended for freezing since they may separate and curdle on thawing.	Raised doughnuts freeze best. Cake-type doughnuts may become slightly crumbly. Glazed doughnuts lose the glaze on freezing and thawing. Prepare all types as usual and cool.
CREAMED CASSEROLE DISHES Meat, Fish, Poultry	CREAM PUFF AND ECLAIR SHELLS Baked	CUSTARDS	DOUGHNUTS
	Prepare as usual. Slightly andercook added food. If containers. Cover with a waxy rice flour is available, use it to replace half or more cooked eggs and cooked pan in cold running water or in ice water. Stir to hasten cooling, but don't beat in air.	undercook added food. If with ender cook added food. If waxy rice flour is available, undercook added food. If waxy rice flour is available, use it to replace half or more of the flour. Omit hard-cooked eggs and cooked potations. Cool rapidly by setting pan in cold running water or in ice water. Stir to hasten cooling, but don't beat in air.  Make as usual. Cool. Slit and remove any moist parts. Do not fill with cream filling. Ice cream may be used as filling pled moisture-resistant paper.	CASSEROLE Prepare as usual. Slightly undercook added food. If waxy rice flour is available, containers. Cover with a cooked four. Omit hard-cooked eggs and cooked poor in ice water. Stir to hasten cooling, but don't beat in air.  FELLS  Not recommended for freezering undercook added food. If with cream filling. Ice cream may be used as filling in gince they may separate and curdle on thawing.

1			
2 weeks	l to 2 months	Mousses, fruit sponges, Bavarians—2 months. Others—6 months.	2 months
Thaw in container at room temperature about 3 hours. Celery may cause some separation, but light tossing or stirring will recombine.	Thaw in container in refrigerator.	Thaw in refrigerator or at room temperature until soft enough for serving.	Heat in top of double boiler. Break the frozen blocks.
Package in rigid container. Fill air spaces with crumpled moisture-resistant paper.	Package in rigid containers or plastic bags.	Package in rigid containers, or leave in molds. Fill air spaces with crumpled moisture-resistant paper.	Package in rigid containers.
Make as usual.	Do not freeze fillings containing cream or eggs. Frosting containing egg whites becomes spongy. Frozen frostings lose some gloss and ones with much granulated sugar may become grainy. Frostings containing confectioners' sugar freeze best. Cooked frostings may crack.	Use recipes with a cooked base, gelatin, marshmallow, or other stabilizer. Recipes with whipped egg white are not successful. Mousses need only be mixed and poured into container. Fruit sponges and Bavarians should be frozen before they are set; they will be firmer after thawing and have less leakage.	Since gravies tend to separate and curdle when thawed, it is better to freeze broth and make the gravy just before serving. If gravy is to be frozen, adding ¼ teaspoon gelatin to each quart of gravy reduces curdling. If waxy rice flour is available, use it to replace half or more of the flour. Fat separation occurs only when too much fat is used in relation to flour.
Salads (not gelatin type)	FROSTINGS AND FILLINGS	FROZEN DESSERTS Ice cream, ices, mouse, sherbet, fruit sponge, Bavarian	GRAVY

STORAGE TIME	1 to 2 months	l month	l month	1 to 3 months	2 to 4 months	* * * * * * * * * * * * * * * * * * * *
TO SERVE	Thaw until soft enough to serve.	Thaw in sauce or in a steamer about 10 minutes.	Do not thaw or remove foil cover. Heat in 400° oven for 20 to 30 minutes. For crisp foods uncover the last 10 to 15 minutes.	Thaw at room temperature. Place in a shallow pan and heat, without a cover, in a moderate oven, 350° F, for 30 to 45 minutes.	Thaw dry meat in wrapping in refrigerator or at room temperature. Or set container in water. If wrapped in aluminum foil, heat in slow oven, 325° F.  Thaw meat with sauce in refrigerator 5 to 6 hours, or heat slowly on top of range or in oven.	4
PACKAGING	Freeze before wrapping. Wrap in moisture-vapor-resistant paper. If large containers are stored partially filled, fill to top with moisture-resistant paper, or transfer ice cream to smaller cartons.	Freeze in cartons or plastic bags.	Package in individual servings or in sectional foil trays. Cover with foil. Exclude as much air as possible. Wrap in moisture-vapor-resistant paper. Scal.	Freeze on trays. Wrap pieces in moisture-vapor-resistant paper, or place in plastic bags.	Dry (for short storage)—Package in moisture-vapor-resistant paper With sauce or broth—Package in rigid containers. Cover sliced meat with sauce, gravy, or broth. Cover with a piece of crumpled moisture-resistant paper. Leave head space (see page 7).	4
PREPARATION	Make as usual. May use commercial.	Usually better to cook just before using. If they are to be frozen, undercook slightly.	Use foods listed in this bul- letin which are recommended for freezing. Prepare as usual or may use leftovers.	Frozen fried meats and poultry may lose some fresh flavor and crispness. Fry as usual until almost done. Cool quickly.	Roast as usual. Remove as much fat as possible. May be boned to save space, but keep pieces large. Turkey and other large fowl should be cut from the frame to save space. Ham and other cured meats often lose their color when frozen and become rancid more quickly than other meats. Gravy, sauce, or broth helps to keep meat from dry-	ing out and losing color.
FOOD	ICE CREAM, PLAIN OR USED IN—Pies, cakes, rolls	MACARONI OR SPAGHETTI	MEALS, WHOLE	MEAT AND POULTRY Fried	Roast	10 to

6 to 8 weeks	Bake, still frozen, in a very hot oven, 475° F, until light brown. Or, fill and bake as	Stack the pie pans with two pieces of moisture-resistant paper between each; then one	Make regular pastry or crumb crust as usual. Fit into pie pans. Pastry may be stored flat,	PASTRY Unbaked
6 to 8 months	Thaw before using.	Package in rigid containers or plastic bags. Seal.	Shell.	NUTS
4 to 6 months	Cut vents in crust. Bake without thawing in hot oven, 400° F, about 45 minutes for individual pies and 1 hour for larger pies, or until meat mixture is piping hot and crust is golden brown.	Wrap in moisture-vapor-resistant paper. Or, freeze pie before wrapping and store in plastic bag.	Prepare meat and vegetables as usual. Cook until nearly done. It is best to omit potatoes. Cool container quickly in running cold water or in ice water. Do not use bottom crust. Pour meat mixture into casserole or individual containers. Top with pastry. Do not cut vents in pastry. Do not bake.	Meat pies
3 to 4 months	For unbaked frozen loaf, unwrap and put in pan. Bake in 350° F oven for 11/2 hours. To serve baked loaf cold, thaw in wrappings in refrigerator; to reheat, unwrap and place in pan unthawed in 350° oven for 1 hour.		Follow directions given for fish loaf, page 16.	Meat loaf
4 to 6 months	Partial thawing in package at room temperature will help to prevent overcooking. Heat partially thawed or frozen food in top of double boiler or in a hot oven, 400° F, about 1/2 hour.	Use rigid wide-mouthed containers. Be sure meat is covered with sauce or broth.  Leave head space (see page 7).	Make as usual, keeping fat to a minimum. Omit potatoes from stew. Slightly undercook other stew vegetables. Freeze meat balls and spaghetti sauce, and cook spaghetti just before serving. Cool rapidly by setting pan in running cold water or in ice water.	Combination meat dishesstews, spaghetti sauce with meat or meat balls, ravioli
*			See directions on page 16.	Dressing, for meat or poultry

STORAGE TIME		2 to 3 months	2 weeks		3 to 4 months	**************************************
TO SERVE	usual.	Thaw in wrapping at room temperature 10 to 20 minutes. Add filling.	Thaw unwrapped at room temperature for 1 hour.		Cut vent holes in upper crust. Place on cooky sheet. Bake without thawing for 15 to 20 minutes in a very hot oven, 450° F, then reduce heat to 375° F and bake for 20 to 30 minutes more, or	until top crust is brown. Un-
PACKAGING	crust may be removed at a time. Cover top pie crust with paper. Wrap stack with moisture-vapor-resistant paper.  If preferred, several flat rounds of pastry may be stored on cardboard and separated with two pieces of moisture-resistant paper between each one.	Leave in pie pan or freeze before wrapping and remove from pan. Wrap in moisturevapor-resistant paper, excluding as much air as possible. Storage in a box or carton will protect shells.	Freeze before wrapping. Wrap in moisture-vapor-re- sistant paper or put in plastic bag. Store in carton.		Freeze fruit pies in their pans. Wrap in moisture-vapor-resistant paper or put in plastic bag. Store in carton or cover with second empty pan turned upside-down and tape edges together.	If baked, cool in pan and
PREPARATION	on cardboard. Prick regular pastry.	Bake as usual and cool.	Make with gelatin base.	Not recommended for home freezing. Commercial additives can be used to keep product smooth.	Make as usual, except that for very juicy fillings add an extra tablespoon of flour or tapioca, or $V_2$ tablespoon of comstarch. This will help to prevent fillings from boiling over when pies are baked. Do	not cut vents in top crust.
FOOD	PASTRY, continued	Baked	PIES Chiffon	Custard and cream	Fruit	A A A A A A A A A A A A A A A A A A A

[20]

6 to 8 months  I month	Thaw just enough to spread in pie crust.  To bake, unwrap and bake unthawed in 450° F oven for 15–20 minutes.	Freeze in rigid containers.  Leave head space (see page 7).  Cool, if topping is warm.  Wrap in moisture-vapor resistant paper. Seal.	Make as usual.  Prepare as usual.  Do not bake.	Fruit pie fillings
4 to 5 weeks	Bake without thawing, 10 minutes in a hot oven, 400° F; then reduce heat to 325° F to finish baking.	Package the same as fruit pies.	Prepare pie shell and filling as usual. Have filling cold before adding it to unbaked and cooled pie shell.	Pumpkin
3 to 4 months	Unwrap and heat, unthawed at 350° F for 30 minutes.	Cool in pan and wrap in moisture-vapor-resistant paper. Seal.	Make as usual.	Nut (pecan or other)
6 to 8 months	To bake, follow directions for fruit pies.	Package the same as fruit pies.	Make as usual. Do not cut vents in top crust. Do not bake.	Mince
			Freezing not recommended.	Meringue
	wrap and heat unthawed at 400° F for 30–35 minutes.	wrap as above.	Do not bake.  Steam and cool light fruits before making pie, or— For apple pie: Dip raw apple slices in mixture of ½ tea- spoon ascorbic acid to 1 cup water. One cup will treat apples for 4 or 5 pies. For peach pie: Peel peaches without scalding. Slice. Mix with 1 tablespoon lemon juice or ¼ teaspoon ascor- bic acid in 1 teaspoon water per pie.	

_							1
	STORAGE TIME	2 to 4 weeks	2 to 3 months	2 weeks	1 month	2 weeks	
	TO SERVE	Unwrap and bake without thawing in a hot oven, 400° F, until thoroughly heated and lightly browned (about 15 minutes).	Spread on baking sheet. Heat unthawed and finish browning in a 475° F oven for about 5 to 6 minutes, or brown in deep fat (watch carefully for spattering).	Thaw just enough to slip into top of double boiler. Stir while heating. Or, fry patties slowly, without thawing.	Thaw in bag. Use as freshly cooked.	Place in cold oven, or partially thaw at room temperature. Add milk if necessary. Complete baking.	
	PACKAGING	Cool. Wrap individually in foil and freeze. May then be put into carton or plastic bag. Or pack into a carton and fill spaces with crumpled moisture-resistant paper. Over-wrap carton. Or put two halves together, wrap in freezer foil or put in plastic bags.	Pack in rigid container or plastic bag.	Pack patties with 2 pieces of moisture-resistant paper between layers. Press bulk potatoes tightly into container in layers, with 2 pieces of moisture-resistant paper between layers. Press out air spaces. Place crumped moisture-resistant paper on top.	Pack in plastic bag.	Cover surface with moisture- resistant paper cut to fit. Wrap in moisture-vapor-re- sistant paper or put in plastic bag.	
	PREPARATION	Bake and stuff as usual.	Cut strips rather small. Blanch or scald in boiling water for 1 to 2 minutes. Drain well. Fry quickly to light brown. Drain. Do not salt. Cool quickly.	Make as usual. Shape into patties or leave in bulk.	Boil until barely tender.	Prepare and bake as usual until almost tender and a delicate brown color. Leave in baking dish. Cool quickly.	
	FOOD	POTATOES Baked and stuffed	French fries or shoestring	Mashed	New (very small)	Scalloped	
	[22]						

7	Pubbinds	* * * *			
	Steamed	Prepare and steam as usual, using as little fat as possible. Remove from container; cool in air. If highly spiced, reduce spices one third to one half.	Return to original container and wrap with moisture-vapor-resistant paper or put in plastic bag.	Reheat unthawed in steamer or double boiler. Or thaw at room temperature for 6 hours and then steam.	8 to 10 months
	Bread, rice, or tapioca	Prepare as usual. Cool container of pudding quickly in cold running water or in ice water.	Package in rigid container. Leave head space (see page 7), Cover surface with crumpled moisture-resistant paper. Individual containers may be used.	Thaw in container in refrigerator.	2 weeks
	RAVIOLI	See MEAT, Combination dishes, page 19.			
	SALADS Fruit Meat, poultry, and	Salads which freeze well are fruit salads which are served frozen with a base of cream or cottage cheese, whipped cream, mayonnaise, or gelatin combined with one of these (not a separate gelatin layer). Do not use apples, grapes, or nuts.	Fit a piece of moisture-resistant paper over the top. Wrap in moisture-vapor-resistant paper.	Mellow in refrigerator about 1 hour, but serve before completely thawed.	6 to 8 weeks
	shellfish	Salad on page 17.			
	SANDWICHES, CLOSED For open-face sandwiches see "Appetizers"	Use day-old bread. Spread to edges with softened butter or margarine. Omit: crisp vegetables, hard-cooked egg white, tomato, jellies and jams. Mayonnaise tends to separate. Use a salad dressing, or home-cooked dressing.	Wrap individually or in groups in moisture-vapor-resistant paper. Sandwiches may be carefully wrapped in double thicknesses of waxed paper if kept only a week or two. Keep them away from the freezer wall to prevent	Thaw at room temperature in wrappings 3 to 4 hours. Frozen sandwiches in a lunchbox will thaw in 3 to 4 hours, and will help keep other food cool.	Cheese, ham, bologna—3 to 4 weeks. Others—3 to 6 months.

	PREPARATION	PACKAGING	TO SERVE	STORAGE TIME
		uneven moistness when thawed. Store in box or plastic bag.		
If flour is sauce, see Since spic over long add them	If flour is used in making sauce, see GRAVY, page 17. Since spices may change flavor over long storage, it is best to add them just before serving.	Package in rigid container. Cover with crumpled moisture-resistant paper, Leave head space (see page 7).	Thaw in package at room temperature, or heat in top of double boiler. Stir well if sauce tends to separate.	3 to 4 months
Make as by 2 tab egg soul plain so to direc (Unbak	Make as usual. Increase flour by 2 tablespoons for whole egg soufflés or unsweetened plain soufflés. Bake according to directions in recipe. (Unbaked less desirable.)	If unbaked, freeze as soon as mixed; then wrap. If baked before freezing, cook for I hour. Wrap in moisturevapor-resistant paper.	Thaw baked souffles for 2 hours before reheating. Un- baked souffles bake unthawed at usual temperature.	6 months
Omit posible, co less lique evapora cooking cooked a cream se placing water on	Omit potatoes. When possible, concentrate by using less liquid in preparing, or by evaporating liquid when cooking. Vegetables may be cooked and puréed for use in cream soup. Cool quickly by placing pan in cold running water or in ice water.	Package in rigid containers. Leave head space (see page 7). Or, freeze in ice cube trays, and store cubes in plastic bag.	Heat without thawing; heat cream soups in top of a double boiler. If cream soup has separated, stirring will make it smooth. If concentrated, add hot liquid. Add potatoes or other vegetables needed. Vegetable purée may be thawed in covered casserole in oven (400° F) or in double boiler and then add cream or milk.	4 to 6 months
See ME dishes,	See MEAT, Combination dishes, page 19.			
			4	4

STEW	See MEAT, Combination dishes, page 19.		* * * * * * * * * * * * * * * * * * *	* * *	y ·
SWEET POTATOES	Cook until soft. Allow to cool at room temperature. Peel.				
Mashed	Use 1/4 to 1/3 cup orange juice to 1 cup mashed sweet potatoes. Other seasonings can be added when used.  Or dip peeled potatoes for 5 seconds in a solution of 1 tablespoon citric acid (or 1/2 cup lemon juice to 1 quart water. Mash.	Pack as described for bulk mashed potatoes above.	Heat in top of double boiler, or bake in a greased or teflon-coated pan.	6 to 8 months	
Slices or candied	Slice cooked potatoes and dip for 5 seconds in a solution of 1 tablespoon citric acid (or 1/2 cup lemon juice) to 1 quart water. For candied potatoes, use cooked slices or whole small cooked potatoes and dip in lemon juice, drain, and then roll in sugar.	Pack in rigid containers or plastic bags. Fill air spaces with moisture-resistant paper.	Bake in a greased baking pan in a moderate oven, 350° F, for 25 to 30 minutes, or heat in a heavy pan on top of stove.	Candied—6 to 8 months Slices—2 to 3 months	
Sweet potato balls	Follow directions for mashed sweet potatoes. Form into balls. Brush with melted butter or margarine. Roll in crushed cereal flakes or finely chopped nuts.	Freeze balls on baking sheet before packaging. Package in rigid containers or plastic bags. Fill air spaces with moisture-resistant paper.	Bake on a greased baking sheet in a moderate oven, 350° F, for 25 to 30 minutes.	1 month	

### Acknowledgments

The authors wish to acknowledge the assistance given by specialists of the Agricultural Extension Service, University of California; members of the departments of Food Science and Technology of the University of California; the Western Utilization Research and Development Division, United States Department of Agriculture; and members of the spice industry.